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(54) Moulding for window plate of vehicle

(57) To prevent abnormal sounds made by the vibrations of the tip of a seal lip of the moulding for a window plate of a vehicle which are created when the air is sucked out from the inner cavity by the difference in pressure between the inside and the outside of the seal lip when the vehicle runs at high speeds, a seal lip body 4a extends in the direction of a vehicle body panel P from the leg of the moulding 1 for a window plate and a folded-back lip 4b is consecutively integrally formed such that it folded back in the opposite inward direction from the tip of the seal lip body 4a into the cavity 5 between itself and the vehicle body panel P and extends along the vehicle body panel P. When the vehicle runs at high speeds, even if the seal lip 4a is moved up by the difference in pressure between the inside and the outside of the seal lip body 4a, the folded-back lip 4b is pressed on the vehicle body panel P and thus the air does not leak from the cavity 5. Therefore, it can prevent the abnormal sounds which are produced when the air leaks.

Fig. 1

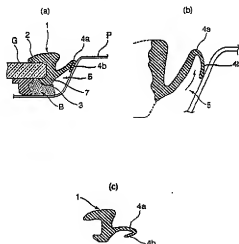


FIG. (b) is an enlarged cross sectional view of the moulding when the vehicle runs at high speeds; FIG. 3 is an enlarged cross sectional view of the moulding for the window plate of the third embodiment according to the present invention; FIG. 4 illustrates the flow of the wind which the vehicle receives when it runs at high speeds; FIG. 5 illustrates the flow of the wind for the moulding for window plate when the vehicle receives when it runs at high speeds; and FIG. 6 illustrates in a cross sectional view the state in which the air leaks from the cavity of the moulding for the window plate when the vehicle with a conventional moulding for window plate runs at high speeds.

Preferred Embodiments

The embodiments of the present invention will be hereinafter described in connection with FIGs. 1 to 3.

The moulding 1 for the window plate of the first embodiment of FIG. 1 is usually made of resin formed by extrusion. The lip 2 of the window plate side extends toward the center of the outer surface of the window plate G to a predetermined width and the bottom projection 3 extends from the bottom side to a predetermined width, respectively, and thus the lip 2 of the window plate side and the bottom projection 3 pinch the window plate G.

A leg 7 is stuck on a vehicle panel P with adhesive B.

A seal lip body 4a extends in the direction of the vehicle body panel P from the leg 7 of the moulding 1 for this window plate to the predetermined width.

A folded-back lip 4b is consecutively integrally formed such that it folded back in the opposite inward direction from the tip of the seal lip body 4a into the cavity 5 between itself and the vehicle body panel P and extends along the vehicle body panel P.

FIG. 1 (c) shows the shape of the moulding 1 before attachment to the panel. It will become clear upon comparing FIG. 1 (a) with FIG. 1 (c) that the seal lip body 4a is elastically deformed in nearly 45° and the folded-back lip 4b is pressed on the vehicle body panel P with the cavity 5 by the elastic force thereof to perform sealing function when it is stuck to the panel. And it is needless to say that the state of this elastic deformation is the same in the following other embodiments.

When the vehicle runs at high speeds, even if the seal lip 4a is moved up by the difference in air pressure between the inside and the outside of the seal lip body 4a, the folded-back lip 4b is pressed on the vehicle body panel P, as shown in FIG.1(b), and thus air does not leak from the cavity 5. Therefore it can prevent the occurrence of the abnormal sounds made by the vibrations of the conventional seal lip which are created when the air leaks.

Next, FIG. 2 shows the second embodiment

according to the present invention in which the seal lip body 14a is formed such that it does not extend from the leg but extends nearly flush with the lip 12 of the window plate side.

Moreover, a projection 14c is made at the tip of the seal body 14a of this case such that it is put into contact with the outer surface of the vehicle body panel. And the spirit of folded-back lip which extends in an opposite inward direction from the tip of the seal lip body in what is claimed includes the case like this.

In the embodiment shown in FIG. 2, the folded-back lip 14b is also formed in an inward direction such that it enters between seal lip 14a and the vehicle body panel P and extends along the vehicle body panel P.

When the vehicle runs at high speeds, the seal lip 14a is moved up by the force which is produced by the difference in air pressure between the inside and the outside of the seal lip body 14a when the air in the cavity 15 is going to leak but, as shown in FIG. 2(a), the folded-back lip 14b is pressed on the vehicle body panel P, whereby the air in the cavity 15 does not leak. Therefore it can prevent the occurrence of abnormal sounds made by the vibrations of the conventional seal lip which are created when the air leaks.

Next, in the embodiment shown in FIG. 3, the length of the folded-back lip 24b is longer than the length of the folded-back lip of the embodiment shown in FIG. 2.

The length of the folded-back lip 24b is set such that it can prevent the air in the cavity from leaking due to the difference in air pressure between the inside and the outside of the seal lip body 24a even if the vehicle runs at the highest speed thereof.

Advantages of Invention

Since the moulding for window plate according to the present invention prevents the air from leaking from the inside of the seal lip even if the vehicle runs at high speeds, it produces an effect that it can prevent the occurrence of abnormal sounds made by the vibrations of the tip of the seal lip which are created when the air leaks.

Claims

1. A moulding for a window plate of a vehicle comprising a seal lip which is mounted to the edge of said window plate of said vehicle and is disposed between said window plate and a vehicle panel and is elastically put into contact with said vehicle panel, wherein said seal lip has an integrally formed folded-back lip which extends in an opposite inward direction from the tip of a seal lip body extending outward.

Fig. 2

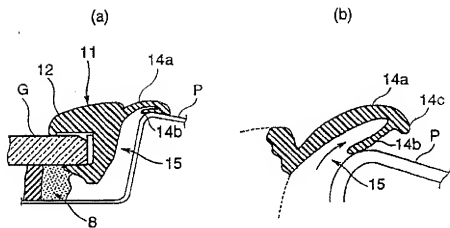


Fig. 3

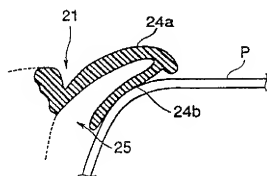


Fig. 6

